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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,259

06/16/2005

Florin Pricop

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EXAMINER

SGAGIAS, MAGDALENE K

ART UNIT

PAPER NUMBER

1632

MAIL DATE

DELIVERY MODE

07/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/539,259

Applicant(s)

PRICOP, FLORIN

Examiner

Magdalene K. Sgagias

Art Unit

1632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's arguments filed 4/25/07 have been fully considered but they are not persuasive. The amendment has been entered. Claims 6-12 are pending and under consideration. Claims 1-5 are canceled.

Specification

The objection to the specification has been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The prior rejection of Claim 6 under 35 U.S.C. 102(b) is maintained for reasons of record mailed on 12/29/06.

Applicants argue in Pricop et al, the females have reddish black feathers on the head and neck and black feathers on the body. Applicants argue the heterozygous genotype (bB) provides no explanation concerning the gene mechanism that determines day-old chick sexing by the color of the juvenile feathers. Applicants argue the interaction between the gold and the barred genes of the heterozygous reddish-black females (bB) is altered by the epistatic action (E) of the dominant sex gene over

the barred gene. Applicants argue, thus the allelic interaction is changed in females (bB) and remains unchanged in males (Bb), which allows hybrid day-old chick sex determination by the color of the juvenile feathers. Applicants argue thus, Pricop is missing elements of the present claims.

These arguments are not persuasive because Pricop is not missing any elements for claim 6, because Pricop teach each method step of the claim. **Pricop**, teaches a procedure of genetic recombination for Galinacea hybrids breeding based on the linked transmission of the genes coding for sex and feathers color, in which the cross of the homozygous for the bared gene (BB) Marans female with the recessive (bb) Rhode Island male yielded in F1 generation of ROBAR SL commercial hybrid as in the claimed invention. Pricop also teaches crossing of the F1 male Bb to female bB as in the claimed invention. Pricop does not teach that the F1 generation is 50% heterozygous (Bb) males and 50% heterozygous for the (bB) females, but inherently said F1 generation is embraced in Mendelian genetics, wherein the relationship between phenotype and genotype were first described by Mendelian genetics. The epistatic mechanism is not required for assessing the F1 or F2 generation by the feather color.

Additionally, Applicants' arguments, regarding the reddish black color of the female hens are not found to be persuasive. The claims require that the females have black juvenile feathers on the body and head. Pricop teach this embodiment, see, for example, claim 2. The reddish black color is found in the adult hybrid hens, which is not

a requirement for the instant claim. Accordingly, because Pricop teach each step of the claimed method, they anticipate the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-12 rejection under 35 U.S.C. 103(a) is maintained for reasons of the record mailed on 1/3/07.

Applicants argue thus as Pricop is missing elements of the present claims also as Campo is missing elements of the present claims, the present claims would not have been obvious over such a combination. Applicants state that in Campo, the females are non-barred, hemizygous and they do not teach or suggest the presence of the presence of the barred gene in chromosome W.

These arguments are not persuasive because Pricop teaches a procedure of genetic recombination for Galineceae hybrids breeding based on the linked transmission of the genes coding for sex and feathers color. **Pricop**, teaches the ROBAR SL hybrid females have different colored plumage than that of the parents and these results obtained both experimentally and in production conditions demonstrate that the barred and golden genes are present in the homozygous state in the parents. In the ROBAR SL hybrid females the barred gene (B) is present in the W chromosome

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demonstrating the existence of a heterozygous genotype (bB) and non-functionality of the mechanism of homozygosity. **Pricop** also notes the disadvantage of using these chickens in programs for obtaining commercial hybrids consists in the fact that around 250 eggs per hen was taken as the basis of selection, as a result of the system of selection known and applied, taking into consideration only the additive genetic interactions, thus increasing the frequency of homozygotes in the population, which has been compensated by other epistatic actions of the genes, which keep them in genetic equilibrium. **Campo** teaches sex-linked crosses involving the barred (B) and unbarred (b+) alleles can be used for sex determination of day old chicks in combination with the eWh/eWh, Co/Co, Mi/MI genotype, which provides a black down background for the B-induced white head spot. Campo reports that sex chick down segregation in the F1 generation from the mating Melatonic Prat to barred melatonic Columbian was 94-100% accuracy. As such, Campo provides sufficient motivation for one of ordinary skill in the art to apply the Mendelian genetics of Pricop for epistatic action on the barred gene, which allows day-old sexing of the recombinant hybrids by the feather color and which in relation with the recessive (sdw) allele located on the chromosome Z determines the formation of the heterozygous (SDWsdw) female genotype while in relation with the recessive (sdw) sex gene present in both chromosomes Z forms the recessive homozygous (sdwsdw) male genotype. As such the cited combination of references is obvious.

Conclusion

No claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magdalene K. Sgagias whose telephone number is (571) 272-3305. The examiner can normally be reached on Monday through Friday from 9:00 am to 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Paras, Jr., can be reached on (571) 272-4517. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) or Public PAIR. Status information for

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unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

Magdalene K. Sgagias, Ph.D.
Art Unit 1632

/Thaian N. Ton/
Primary Examiner
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